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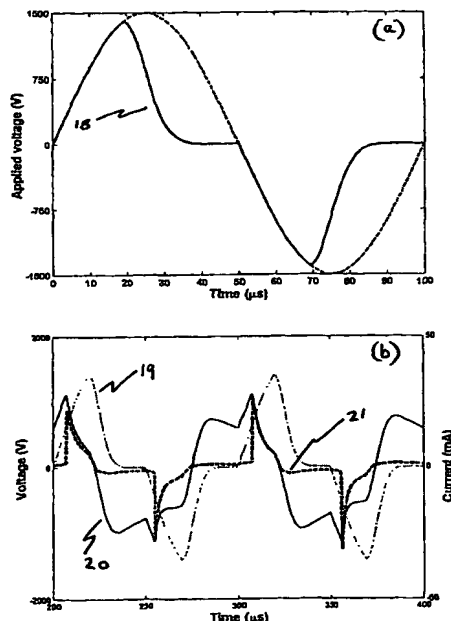
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- (71) Applicant (for all designated States except US): **LOUGHBOROUGH UNIVERSITY ENTERPRISES LTD** [GB/GB]; Rutland Hall, Loughborough University, Loughborough, Leicestershire LE11 3TU (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **KONG, Michael, Gangyu** [GB/GB]; Department of Electronic and Electrical, Engineering, Loughborough University, Leicestershire LE11 3TU (GB). **DENG, Xutao** [CN/GB]; Department of Electronic and Electrical, Engineering, Loughborough University, Leicestershire LE11 3TU (GB).
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— as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES,**

[Continued on next page]

(54) Title: **GENERATION OF DIFFUSE NON-THERMAL ATMOSPHERIC PLASMAS**



(57) Abstract: A method of generating non-thermal atmospheric gas plasmas using an applied voltage with specially-shaped waveforms. The waveforms are shaped to avoid energy wastage by attenuating the voltage in the period after current discharge has occurred. A control system may also be used to shape the applied voltage waveform in response to the gas discharge current.

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# INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER  
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According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H05H H01J

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 97 13266 A (UNIV TENNESSEE RES CORP) 10 April 1997 (1997-04-10) page 2, paragraph 2 page 5, paragraph 2	2,4
Y	page 8, paragraph 3 page 24, paragraph 1-2 claims 11,12; figures 8a-8b	3
Y	US 4 370 526 A (SCHOOF FRANCISCUS A C M ET AL) 25 January 1983 (1983-01-25) column 2, line 63 - column 3, line 10	3
A	figures 3-4a ----- -/-	1

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

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Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
Fax: (+31-70) 340-3016

Authorized officer

Capostagno, E.

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 0112, no. 73 (C-445), 4 September 1987 (1987-09-04) & JP 62 077479 A (SHIMADZU CORP), 9 April 1987 (1987-04-09) abstract; figures	2
A	US 6 106 659 A (SPENCE PAUL ET AL) 22 August 2000 (2000-08-22) column 8, line 46 - column 9, line 24 column 17, line 1 - line 21 figure 10	2, 4
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